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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,164	12/02/2003	Simon Robert Walmsley	PEA19US	6693
24011 7590 03/12/2009 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA				
EXAMINER				
POWERS, WILLIAM S				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/727,164

Applicant(s)

WALMSLEY, SIMON ROBERT

Examiner

WILLIAM S. POWERS

Art Unit

2434

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4-7 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4-7 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/28/2008 have been fully considered but they are not persuasive.
2. As to Applicant's argument that, "Seriwaza discloses that whilst sufficient toner remains neither the service life address 6 nor the memory lock address 8 are written to at all, which is contrary to the first message of the claimed invention (Remarks, p. 6, lines 1-5), the Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "whilst sufficient toner remains neither the service life address 6 nor the memory lock address 8 are written to at all") are not recited in the rejected claim(s). There is nothing in the claim language that limits the writing to the security fields "whilst sufficient toner remains". Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. The Examiner can find no limitations regarding "sufficient toner" that would be contrary to the first message of the claimed invention. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). For at least the reasons above, the rejection of the claims is maintained.

Response to Amendment

3. The Examiner has stated the below column and line numbers as examples. All columns and line numbers in the reference and the figures are relevant material and Applicant should be taken the entire reference into consideration upon the reply to this Office Action.
4. Claims 1 and 11-14 have been withdrawn from consideration.
5. Claims 3 and 8-10 have been cancelled.
6. Claims 2, 4-7, 15 and 18 have been amended.
7. Claims 2, 4-7 and 15-18 are pending.

Specification

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

9. Claims 2 and 12 are objected to because of the following informalities:

- a. As to claim 2, the limitation "an action" in line 7 is assumed to refer to "an action" in the preamble of the claim.
- b. As to claim 12, the label for claim 12 is used twice. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. In light of the Applicant's amendments and arguments, the previous 35 USC 112, 1st and 2nd paragraph rejections of 2 and 3 have been withdrawn.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear from the claim language if there are any write restrictions in place. The amendment states, "wherein the security fields have write restrictions associated with them which prevent the initial values being adjusted:" (claim 2, lines 14-15, emphasis added). It appears that the write restriction is not applied to the security fields, but to the initial values of the security fields. If either of the messages adjusts the initial values in the security fields, the values in the security fields are no longer the initial values and the write restrictions would not apply and any subsequent write message would be able to update the security field values without restriction because they are not adjusting the initial values.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 2, 4-7 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,031,012 to Serizawa in view of US Patent No. 5,315, 635 to Kane et al. (hereinafter Kane).

As to claim 2, Serizawa teaches:

- a. Initializing the first security field with a first initial value and the second security field with a second initial value

b. Sending a first message to the target entity, the first message being configured to cause the entity to perform the action and to adjust the first and second initial values in the first and second security fields by respective first and second amounts (the amount of toner is written to address No. 5 (an action), service life expiration is written to address No. 6 and a memory lock is written to address No. 8 (security fields) with the memory lock indicating that the amount of toner has been updated) (Serizawa, column 7, lines 19-28).

Serizawa does not expressly mention sending a second adjustment message. However, in an analogous art, Kane teaches:

c. Sending a second message to the target entity (determining that a message was not received which indicates that the first action of the first message has not occurred and requesting the re-sending of the un-received message) (Kane, col. 7, lines 9-63), the second message being configured to cause the entity to adjust the first and second initial values in the first and second security fields by respective third and fourth amounts (the amount of toner is written to address No. 5 (an action), service life expiration is written to address No. 6 and a memory lock is written to address No. 8 (security fields) with the memory lock indicating that the amount of toner has been updated) (Serizawa, column 7, lines 19-28).

Therefore, one of ordinary skill in the art at the time the invention was made would have been motivated to implement the printing apparatus that controls write

messages of Serizawa with the message control system of Kane in order to ensure that message reliability as suggested by Kane (Kane, col. 7, lines 28-35).

Serizawa as modified further teaches:

- d. Wherein in the security field have write restrictions associated with them which prevent the initial values being adjusted: in accordance with the first message, if the initial values have been adjusted in accordance with the second message, and in accordance with the second message prevents subsequent if the initial values have been adjusted in accordance with the first message (Serizawa, column 7, lines 1-29).
- e. Wherein the action is only performed when the initial values in the security fields have been adjusted in accordance with the first message (write restriction is put in place after the update has been completed) (Serizawa, column 7, lines 1-29).

As to claim 4, Serizawa as modified teaches:

- a. Prevent the second write from being performed if the event that the first write was previously performed (once a memory lock has occurred, any subsequent command or message to write to the memory is prohibited) (Serizawa, column 7, lines 1-29).
- b. Prevent the first write from subsequently being performed in the event that the second write is performed (once a memory lock has occurred, any

subsequent command or message to write to the memory is prohibited)
(Serizawa, column 7, lines 1-29).

As to claims 5-7, Serizawa as modified teaches that the second message is only sent after the first message is determined to not have been delivered (when a message is not received a notification is sent to the sending unit and the message is re-transmitted) (Kane, col. 7, lines 9-63).

As to claim 15, Serizawa as modified teaches the target entity is a first integrated circuit and the messages are sent by a second integrated circuit (printer engine controller and non-volatile memory on toner cartridge) (Serizawa, column 4, line 66-column 5, line 44).

As to claim 16, Serizawa as modified teaches the second integrated circuit is a printer controller (engine controller) ((Serizawa, column 4, line 66-column 5, line 44).

As to claim 17, Serizawa as modified teaches the first integrated circuit is installed in a cartridge that is releasably attachable to a printer in which the printer controller is installed, such that the messages can be sent via a communications link between the printer controller and cartridge (the toner cartridge has a non-volatile memory that is in communication with the printer engine controller) (Serizawa, column 4, line 66-column 5, line 44).

As to claim 18, Serizawa as modified teaches wherein the performance of the action causes writing of ink remaining data in a data field of the first integrated circuit as an indicator of ink remaining in the cartridge (non-volatile memory of the toner cartridge has an indication of the toner remaining) (Serizawa, column 4, line 66-column 5, line 44).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM S. POWERS whose telephone number is (571)272-8573. The examiner can normally be reached on m-f 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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3/10/2009
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